IN THE CLAIMS:

Please amend the claims as follows:

1. (currently amended) An ultraviolet-programmable ~~UV programmed~~ P-type Mask ROM, comprising:

a heavily doped N-well in a substrate;

a plurality of bit lines in the heavily doped N-well;

an insulating layer on the bit lines;

a plurality of word lines crossing over the bit lines, wherein the substrate under a word line and between two bit lines serves as a memory cell;

a charge trapping layer between the word lines and the heavily doped N-well; and

an UV-blocking layer over the substrate having a plurality of openings over selected memory cells, wherein the selected memory cells are written by using UV light.

2. (currently amended) The ultraviolet-programmable ~~UV programmed~~ P-type Mask ROM of claim 1, wherein a dopant of the heavily doped N-well comprises phosphorous.

3. (currently amended) The ultraviolet-programmable ~~UV programmed~~ P-type Mask ROM of claim 1, wherein the selected memory cells written by using UV light store e-bit "1".

4. (currently amended) The ultraviolet-programmable ~~UV programmed~~ P-type Mask ROM of claim 1, wherein the charge trapping layer comprises a silicon oxide/silicon nitride/silicon oxide (ONO) composite layer.

5. (currently amended) The ultraviolet-programmable ~~UV-programmed~~ P-type Mask ROM of claim 1, wherein the insulating layer comprises a thermal oxide layer.

6. (currently amended) The ultraviolet-programmable ~~UV-programmed~~ P-type Mask ROM of claim 1, wherein the UV-blocking layer comprises an UV-absorbable layer.

7. (currently amended) The ultraviolet-programmable ~~UV-programmed~~ P-type Mask ROM of claim 6, wherein the UV- absorbable layer comprises an anti-reflection coating (ARC).

Claims 8-20 (canceled)